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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOX: KET NO.	CONFIRMATION NO.
09/957,395	09/19/2001	Anisul Khan	AM5782	4481
7590 03/07/2005			EXAMINER	
Patent Counsel			CULBERT, ROBERTS P	
APPLIED MATERIALS, INC. P.O. BOX 450A			ART UNIT	PAPER NUMBER
SANTA CLARA, CA 95052			1763	
			DATE MAILED: 03/07/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

## **Advisory Action**

Application No.	Applicant(s)	
09/957,395	KHAN ET AL.	
Examiner	Art Unit	<u> </u>
Roberts Culbert	1763	

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 21 January 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. Mar The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: The period for reply expires \_\_\_\_\_months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) a set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appea has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. 🛛 For purposes of appeal, the proposed amendment(s): a) 🗌 will not be entered, or b) 🖾 will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: <u>1-5,9-15 and 21-25</u>. Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE 8.  $\square$  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. 

The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other: \_\_\_\_. P. Hassanzadel SPE, AU 1763

U.S. Patent and Trademark Office PTOL-303 (Rev. 9-04)

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant has argued that the rejection of Claims 1-5, 9-15, and 21-25 under U.S.C. 112 first paragraph should be withdrawn because the specification discloses that layer 42 is optional. The applicant is incorrect. There is no indication, suggestion or teaching in the specification at page .6, lines 8-10 or elsewhere in the disclosure that layer 42 is optional.

Applicant has argued that Sugiyama fails to teach or suggest forming an opening through a semiconductor layer to a first insulating layer and depositing a core material on the first insulating layer to fill the opening, wherein the core material contacts the semicondudor layer along a side of the opening, as recited in clalm 1.

However, Sugiyama does teach all of the claim limitations as broadly recited by applicant. Figure 4C illustrates an opening that has been formed in a semiconductor layer made of several semiconductor materials. It is noted that the claim does not require that the opening be completely formed prior to the step of providing the semiconductor layer. An opening may be formed in a material layer by depositing a material layer in a selective manner, such that an opening is formed, or by selectively removing material from the layer. The claim language of Applicant broadly reads on both techniques. Figures 5a -5c of Sugiyama illustrate that the opening formed in the semiconductor layer of Sugiyama is filled with a core material that contacts the semicondudor layer along a side of the opening, as recited in clalm 1.

H. Willet